What Happens to Your Severe Weather Report: A WFO Perspective

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Severe Weather Reports – Why?

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Why are severe weather reports important to the National Weather Service?

- They provide ground-truth information.
- They aid in our situational awareness.
- They assist us in our verification efforts.

A Fact About Severe Reports:

- **Severe weather reports have a positive impact on the entire integrated warning system.**

National Weather Service Mission:

"To provide weather and flood warnings, public forecasts and advisories for all the United States, its territories, adjacent waters, and ocean areas, primarily for the protection of life and property."

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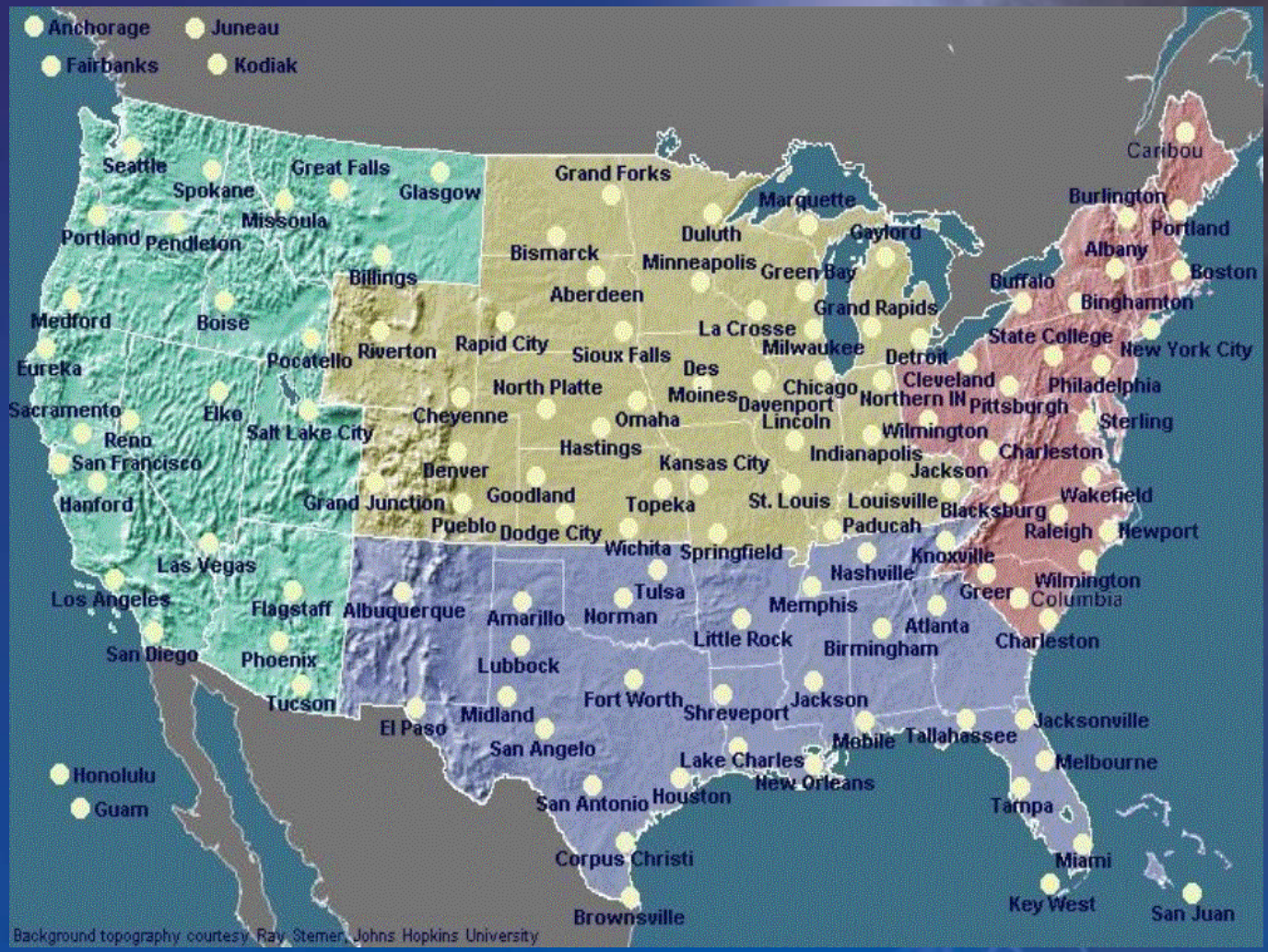
Forecast Offices Nationwide



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The Simple Equation For Getting Reports

Building trust leads to better communication
Better Communication = More Reports

- Our spotter training focuses on teamwork.
- We nurture partnerships with emergency management.
- We proactively collaborate with the media.
- We are supportive of our volunteers - the Skywarn Spotters, Amateur Radio Operators, and Coop Observers.

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We are part of a larger team

- National Weather Service
- PD, FD, EMS, SO
- Local Media – Television and Radio Stations
- Skywarn Spotters and Amateur Radio Operators
- Emergency Management

This Team Protects Our Community

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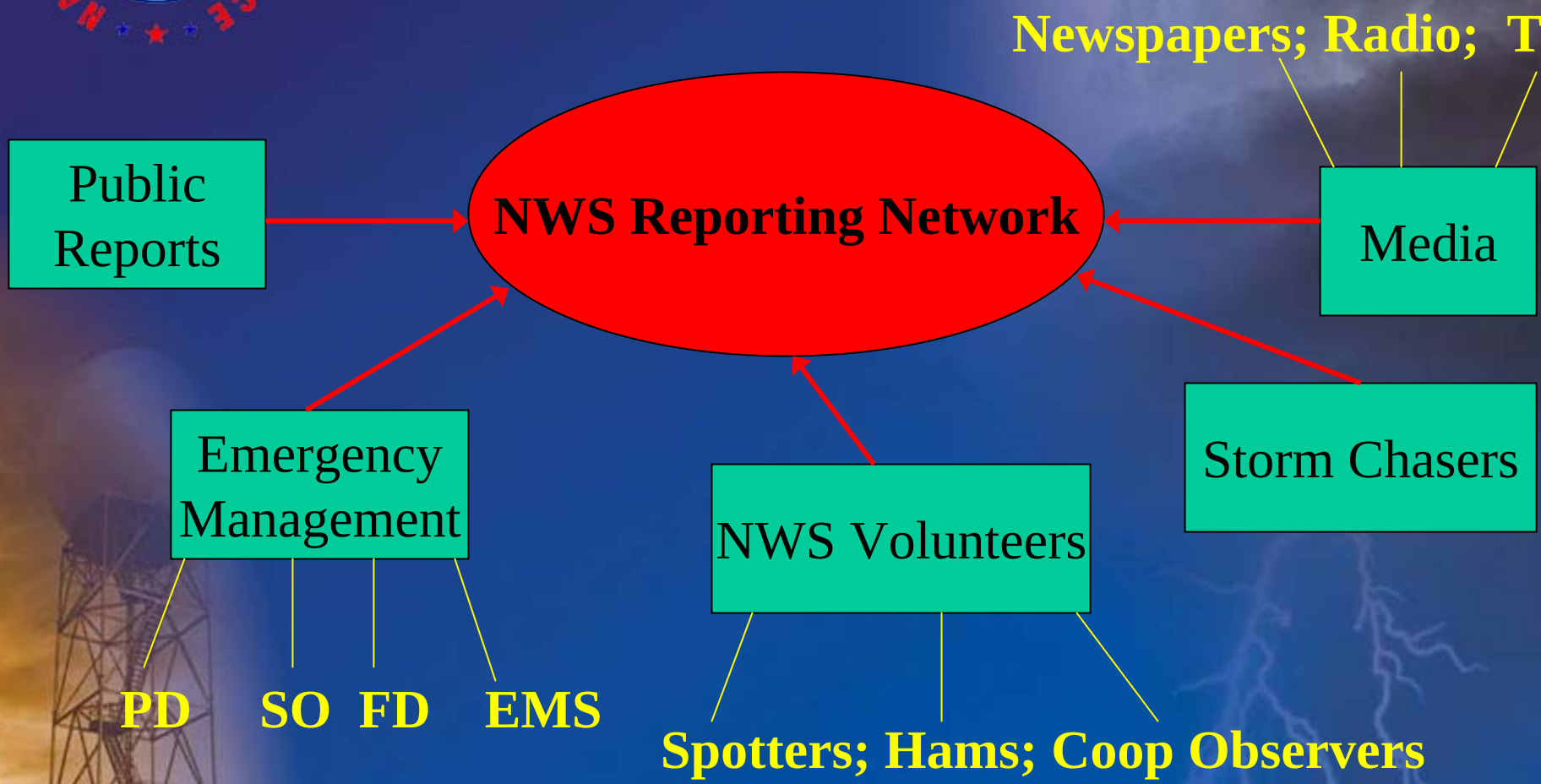
The NWS Reporting Network



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So How Do We Get Reports?

It’s not a simple answer.

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Advances in Information Technology

- Weather Forecast Offices (WFOs) are using MYSQL and PHP to develop Intranet contact databases. (Allowing for warning emails & much more) replacing the old contact binders
- WFOs have talented programmers writing programs to pull spotter information from these databases into AWIPS for graphical display.

Advances in Information Technology

- The use instant messaging is allowing for continual interaction during severe weather events between the NWS and our partners (such as the broadcast media)
- The ability to submit web reports in real-time through the Internet to your local NWS office

Reports…Reports…Everywhere

Improvements in communication…

- Have allowed offices to receive reports live from local television stations
- Have allowed for radar imagery and/or text to be sent through PDAs, pagers, cell phones, and Blackberry(s)

Reports…Reports…Everywhere

The NWS gets reports…

- from Skywarn spotters relayed through Net Control operations via amateur radio
- through observational data from area mesonets, ASOS, AWOS
- through communication on the NAWAS (National Warning System)

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Reports…Reports…Everywhere

The NWS gets weather information…

- by appending contact numbers on severe weather warnings and statements and soliciting for reports.
- through public reports from people who have home weather stations.
- through area webcams.

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Reports…Reports…Everywhere

The NWS gets reports...

- from the aviation and marine communities.
- from dedicated storm chasers.
- from post-event communications.
- from newspaper clipping services.

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Reports…Reports…Everywhere

In summary…

The 122 National Weather Service Offices across the country get severe weather reports in every imaginable way, from every possible resource.

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So what do we do with reports?

- Before a report is accepted, we must determine its accuracy.
- The consistency of the report is evaluated.
- We consider every report to be authentic until proven otherwise.

The Preliminary Local Storm Report

- If a real-time report is deemed to be legitimate, it goes into a special product issued by each National Weather Service Office – the LSR

- The LSR is the “Preliminary Local Storm Report”

- Emphasis should be placed on “Preliminary”

The Preliminary Local Storm Report

- The LSR provides the SPC, adjacent WFOs, and our external partners with reported observations of hazardous weather events.
- The LSR serves as another level of awareness as a severe weather episode is unfolding.
- The LSR is decoded by SPC into the national and hourly reports which can be accessed at:

http://www.spc.noaa.gov/climo

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The Preliminary Local Storm Report

- LSRs are issued for severe weather events such as tornadoes, waterspouts, large hail, flash floods thunderstorm/marine wind gusts, and other types of severe weather events.

- LSRs should contain events that meet of exceed warning criteria.

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The Preliminary Local Storm Report

- LSRs are issued as close to real-time as possible.

- LSRs may “summarize” a list of reports during and/or at the end of an event.

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The Preliminary Local Storm Report

Office have several methods of issuing the LSR.

- Some offices issue LSRs immediately after a report is received and then issue a summary LSR at the end of the event.
- Some offices issue LSRs for each report, but append these new reports to an ongoing list of events.
- Some offices just issue summary LSRs.

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The Preliminary Local Storm Report

Regardless of LSR method, offices generally follow similar guidelines for determining LSR content:

- It doesn't contain multiple reports of the same event.
- Unconfirmed events are omitted.
- Events where partial information would cause confusion are "temporarily" omitted until all data is gathered

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The Preliminary Local Storm Report

- A good example of where partial information might cause confusion would be in the case of a tornado report. (Issues concerning intensity, path length, width, and area affected are very important)
- In many cases, storm damage surveys immediately following an event will answer many questions and provide important details (hard evidence).

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The Preliminary Local Storm Report

- Once that survey is complete, then the entire story can be told.

- Offices will normally provide final information either in an LSR, in a Public Information Statement, or as a write-up on the local office NWS website.

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Post-Event Reports

The first few days following the event are critical:

- Post-event phone calls are made.
- Additional reports trickle into the office.
- News clippings and videos are gathered
- Rural networks are extremely important.
- Once another event occurs, details become sketchy.
- LSRs can be produced for events up to 7 days old.

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Post-Event Reports

- Eventually, once all reports are gathered in final form, the 122 NWS offices across the country begin the Storm Data" process.

What is Storm Data?

- Storm Data is a monthly publication providing “severe and unusual” weather that occurs across the United States.
- The content for Storm Data comes directly from the local National Weather Service offices across the country.

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What is Storm Data?

- Very detailed and complete information
- Offices have 60 Days from the end of the month the event occurred to complete and submit Storm Data.
- It's a grueling process for Storm Data focal points – it takes constant attention to do it right
- Normally a group of people are involved with quality assurance – the data must be accurate.
- Entries are done through the Storm Dat Program

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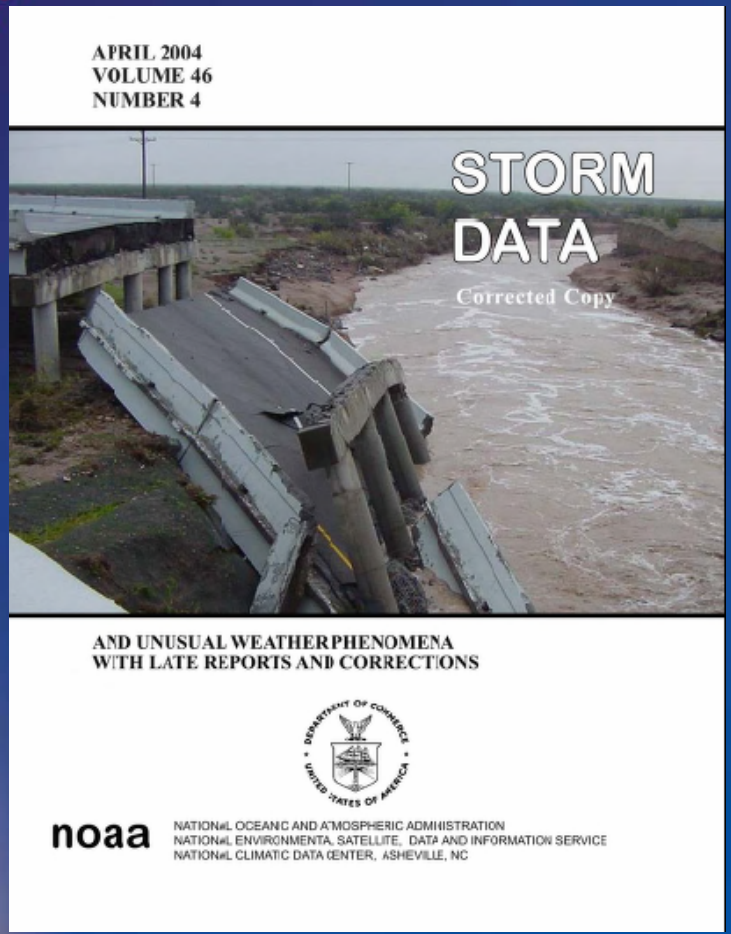
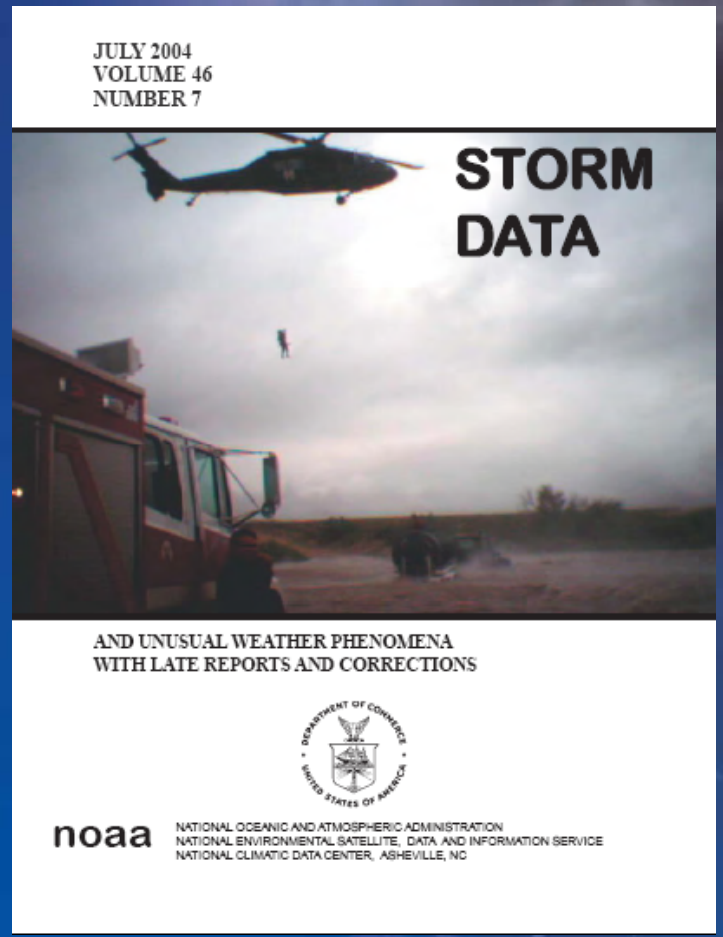
Thank you for your reports!





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